

Examining College Stop out Rates for Students with Disabilities

Nicole Anthony

Fayetteville State University
1200 Murchison Road
Fayetteville, NC 28301
United States

Kaycee Bills

Fayetteville State University
United States

Abstract

The number of individuals with disabilities who enroll in college is increasing. A college degree can lead to various employment opportunities and financial freedom; however, some students with disabilities may frequently stop attending college. Little is known about the factors that influence stop out rates for college students with disabilities. This exploratory study used data from the Beginning Postsecondary Students Longitudinal Study (BPS:12/17) to investigate factors that influence stop out rates among undergraduate students with disabilities. Undergraduate stop out rates were associated with 2- year institutions, private non-profit institutions, for-profit private institutions, and Black students with disabilities. Educational implications are discussed after the results and discussion sections.

Key Words: BPS:12/17, College students with disabilities, Stop out Rates

Introduction

Approximately 20 million students were expected to enroll in postsecondary institutions fall 2020 (National Center for Educational Statistics [NCES], 2019). Postsecondary education dramatically increases one's probability for sustained, meaningful employment. Young adults ages 18-25 with a college degree were able to maintain employment, worked more weeks, and were less likely to be unemployed than those without a college degree (U.S. Bureau of Labor and Statistics [BLS], 2016). An individual with a college degree earns \$1 million more over their lifetime on average than an individual with only a high school diploma (Carnevale et al., 2015). Despite the long-term financial benefits of earning a college degree, some students with disabilities stop attending college or stop out, preventing them from graduating on time or even at all. The purpose of this study is to examine factors that influence stop out rates for students with disabilities using data from the Beginning Postsecondary Students Longitudinal Study (BPS:12/17).

College attendance for students with disabilities

The number of students with disabilities attending college has significantly increased over the past ten years (Ju et al., 2017). A college degree can provide a pathway for financial independence, independent living, increased community involvement, and better health outcomes for individuals with disabilities (BLS, 2021; Newman et al., 2011). However, college students with disabilities are more likely to leave college before completing a degree than their peers without disabilities (Haber et al, 2016; Mamiseishvili & Koch, 2011; Mamiseishvili & Koch, 2012; Newman et al., 2011). College students with disabilities have lower retention and persistence rates than their nondisabled peers (Kim & Lee, 2016; Mamiseishvili & Koch, 2011; Mamiseishvili & Koch, 2012). For example, Mamiseishvili and Koch (2012) analyzed the Beginning Postsecondary Students Longitudinal Study (BPS:04/06) to determine if demographic information, in-college characteristics, different forms of accessible instructional supports, and the type of disabling condition influenced persistence rates for students with disabilities at 2-year institutions. Results from the study indicated that approximately 1 in 4 students with disabilities in the sample did not continue their studies beyond the first year, and a little more than half left without return by the end of their third year (Mamiseishvili & Koch, 2012). Furthermore, when analyzing data from the National Longitudinal Transition Survey (NLTS-2), Newman et al., (2011) found that only 34 percent of college students with disabilities completed a four-year program compared with 51 percent of their peers without disabilities. The completion rates of any postsecondary education by students with disabilities is more than 10% lower for students with disabilities (41%) than for students without disabilities (52%; Newman et al., 2011).

Limited financial resources are probably the most common reasons students leave postsecondary institutions; however, students with disabilities may face several other unique challenges to completing college degree requirements. Students with disabilities may stop out because of increased academic rigor (Toutain, 2019), a paucity of inclusive campus extracurricular activities (Sachs & Schreuer, 2011), lack of self-advocacy and self-determination skills or insufficient support from disability services (Mamiseishvili & Koch, 2011), or unexpected medical problems that are beyond their control (Koch et al., 2016). Additionally, many university campuses are not fully accessible for students with disabilities (Bills, 2017), making it harder for students with disabilities to complete their academic requirements.

While there is some information on college dropout rates for students with disabilities, much less is known about the factors that influence stop out for these students. This study used data from a nationally representative sample, the National Center for Education Statistics (NCES) Beginning Postsecondary Students Longitudinal Study, to investigate factors that influence stop out rates among undergraduate students with disabilities. Specifically, this research study will answer the following question, “What factors influence college stop out rates among undergraduate students with disabilities?”

Method

Data Set

The Beginning Postsecondary Students Longitudinal Study (BPS:12/17) is a nationally representative study conducted by the National Center for Education Statistics (NCES). The BPS:12/17 follows a cohort of college students who are enrolled in their first year of postsecondary education during the 2011-2012 academic school year, collecting data on student persistence in, and completion of, postsecondary education programs, their transition to employment, demographic characteristics, and changes over time in their goals, marital status, income, and debt, among other indicators. Cohort members of the BPS:12/17, were initially surveyed at the end of their first academic year (2011-12) and then received invitations to participate in follow-up surveys at the end of their third (2013-14) and sixth (2016-17) years after entry into postsecondary education. Approximately 22,000 students participated. The study received Institutional Review Board approval.

Sample and variables

Researchers used data from the 2017 wave of the Beginning Postsecondary Students public dataset. The sample included 2,600 undergraduate or former undergraduate students who reported having a disability. A disability was defined as a long-lasting condition such as hearing impairment; or blindness, deafness or a severe vision; or difficulty concentrating, remembering or making decision; or a long-lasting condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying (NCES, 2020). The participants were interviewed in the year 2017, six years after starting their undergraduate studies.

The outcome variable was the number of stop outs anywhere a student was enrolled through 2017. NCES (2020) defines a stop as “a break in enrollment of five or more consecutive months. It begins on the first month of the break. A stop out is also the number of months between two enrollment spells.” The independent variables were race/ethnicity, gender, and institution type. We combined the following groups – American Indian/Alaska Native, or Native Hawaiian/other Pacific Islander, or more than one race – into one group because of collinearity. White students with disabilities as the reference group for race/ethnicity, males as the reference for gender, public 4-year institutions as the reference group for institution types. Of this sample, 43.5% identified as male and 56.5% identified as female. More than half the sample (56.8%) was White; 18.9% was Hispanic or Latino, 14.5% Black or African American, 5.2% Asian, 1.0% was American Indian or Alaska Native, 0.4% was Native Hawaiian/other Pacific Islander, and 3.5% identified as more than one race.

Analysis

Analyses were performed using PowerStats, the online interface of the Beginning Postsecondary Students. We used a linear regression to examine associations between independent variables and stop out rates. A linear regression was chosen because stop out rates were measured on a continuous scale. Due to the exploratory nature of this study, the overall model fit and each significance test was measured using a 0.05 significance level (Cohen, 1968).

Results

Almost 4 in 10 (38.8%) students with disabilities stopped out. The overall regression model was statistically significant ($R^2 = 0.33$, $F [df = 8, 193] = 0.473$, $p < 0.001$). When observing the R^2 , the regression model explained 33% of the variance related to the dropout rates experienced among students with disabilities.

Among students who stopped out during 2017, Black students had .198 more stop outs than did white students with disabilities, controlling for the other variables in the model. Students attending a 2-year institution had .257 more stop outs ($p=0.001$), private non-profit institutions ($b = 0.183$, $p = 0.010$) or attending a for-profit private institution ($b = 0.440$, $p = * < 0.001$).

Table 1:

Linear Regression Model: Sample of 2,600 Undergraduate Students with Disabilities

Variable	<i>B</i>	95% <i>CI</i>	<i>t</i>	<i>p</i>
Race (Ref = White)				
African American or Black	0.198	0.069, 0.328	3.00	*0.003
Hispanic	0.041	-0.118, 0.199	0.512	0.609
Asian	-0.092	-0.357, 0.173	-0.682	0.496
American Indian/Alaska Native/Native Hawaiian/other Pacific Islander/More than one race	0.069	-0.196, 0.332	0.511	0.610
Gender (Ref = Male)				
Female	-0.025	-0.125, 0.075	-0.492	0.623
Institution Type (ref = public)				
Public 2-Year	0.257	0.107, 0.407	3.382	*0.001
Private non-profit	0.183	0.044, 0.322	2.589	*0.010
Private for-profit	0.440	0.311, 0.569	7.151	* < 0.001
R^2	0.049, 95% CL [8, 192]			
F	8.719 ($p = < 0.001$)			

Discussion

The purpose of this exploratory study was to use a multiple linear regression model to examine factors that influence stop out rates for undergraduate students with disabilities. Researchers examined data from the Beginning Postsecondary Students public dataset (BPS:12/17), a nationally representative study conducted by the National Center for Education Statistics. The Beginning Postsecondary Students public dataset was cross sectionally examined from the 2017 wave. Researchers found that nearly 4 in 10 students with disabilities stopped out of their university. Additionally, researchers asked the following research question, “What factors influenced stop out rates for students with disabilities?” Results revealed that students with disabilities attending public 2-year institutions, private non-profit institutions, and private for-profit institutions were more likely than those attending 4-year public institutions to have more stop outs. The results of this exploratory study are not surprising as research has indicated that many students with disabilities attend 2-year institutions, yet they are less likely to obtain a degree or certificate (Mamiseishvili & Koch, 2012).

Moreover, results from this study also revealed that Black students with disabilities were more likely to stop out than their white counterparts. In fact, Black students with disabilities were the only statistically significant racial or ethnic group of students. Among all students nationally who started in four-year public institutions, Black students had the lowest six-year completion rate (45.9%) in comparison to Hispanic students (55.0%), White (67.2%) and Asian students (71.7%; Shapiro et al., 2017). The results of our study suggest that students with disabilities have substantially higher stop rates, and that the same disparities observed in the general population are present for this group as well.

Results from the study underscore the importance of examining the level of independent, self-efficacious, and self-determining behaviors of Black students with disabilities who hope to enter and complete a college education. For example, Shattuck et al. (2014) found that Black college students with autism spectrum disorder had a lower likelihood of seeing themselves as disabled and a lower self-efficacy rating related to getting others to listen. Robust transition plans that support a seamless transition from high school to college may prove essential in helping Black students with disabilities succeed in the postsecondary environment, as well as preventing a multitude of unfavorable outcomes (White, 2016).

Educational Implications

It is critical for IEP teams in middle and high school to develop student-centered transition plans for students with disabilities, especially Black students, that focus on the development of skills associated with self-determination for success in postsecondary environments. Transition planning has shown to create higher employment and postsecondary opportunities for adolescents with disabilities (Wei et al., 2016). As outlined in Section 300.43 of the Individuals with Disabilities Education Act of 2004 (IDEA), “Transition services means a coordinated set of activities for a child that... Is designed to be within a results-oriented process that is focused on improving the academic and functional achievement of the child to facilitate the child’s movement from school to post-school activities.” Beginning at age 16, and in some states as early as 14, IEP teams develop transition plans that are predicated on the strengths, areas of growth, and interests of adolescents with disabilities. Transition plans include instructional strategies, related services, community experiences, and the development of employment and other postsecondary goals. During transition meetings, IEP team members will need to strategically develop and embed opportunities for Black students with disabilities to demonstrate skills associated with self-determination like problem solving, self-advocacy, decision-making, goal setting and attainment, self-awareness, and self-management to strengthen these behaviors before leaving high school.

Unfortunately, even when transition coordinators adequately prepare students with disabilities for postsecondary education, they can still face a range of challenges in the move from high school to postsecondary education. One challenge students with disabilities can face is the changing of legal guidelines that govern access to services and support. Students with disabilities who enroll in college are governed by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA) whereas k-12 education is governed by IDEA (Herrick et al., 2020; Newman et al., 2011). Under IDEA (2004) states are required to identify students with disabilities through no cost evaluations to parents and provide them with reasonable accommodations, instructional supports, and related services. On the other hand, students with disabilities in college will need to self-disclose their disability, provide documentation of the disability, and self-advocate for appropriate accommodations (Toutain, 2019). Once accommodations are obtained from disability services, students with disabilities will need to communicate to their instructors how the disability impacts academic performance. Black students with disabilities may not feel comfortable disclosing a disabling diagnosis due to the stigma associated with being a member of two historically underserved groups (Banks, 2014). Thus, preventing Black students with disabilities from accessing accommodations that will help them be successful in college.

As all studies, this study was not without limitations. The most predominant limitation to this study is it was not a primary data collection by the primary investigators. This study utilized the Beginning Postsecondary Students dataset, a public dataset provided by the National Center for Education Statistics. Additionally, the sample of racial minority students was small compared to the number of white students, thus resulting in small cell sizes for the different racial categories. The disproportionate racial representation could lead to the possibility of type II error in the linear regression when analyzing the race variables.

References

- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*, New York : W.H. Freeman and Company.
- Banks, J. (2014). Barriers and supports to postsecondary transition: Case studies of African American students with disabilities. *Remedial and Special Education*, 35, 28–39.
- Bills, K. L. (2017). Maneuverability experiences faced by individuals who use wheelchairs in settings: A qualitative analysis. *Contemporary Rural Social Work Journal*, 9(1), 10. doi: <https://digitalcommons.murraystate.edu/crsw/vol9/iss1/10>
- Cohen, J. (1968). *Psychological Bulletin*, 70. doi:10.1037/h0026714.
- Carnevale, A. P., Cheah, B., Hanson, A. R. (2015). *The economic value of college majors*. Washington, DC: Georgetown University, Center on Education and the Workforce.
- Haber, M. G., Mazzotti, V. L., Mustian, A. L., Rowe, D. A., Bartholomew, A. L., Test, D. W., &

- Fowler, C. H. (2016). What Works, When, for Whom, and With Whom: A Meta-Analytic review of predictors of postsecondary success for students with disabilities. *Review of Educational Research*, 86(1), 123–162. <https://doi.org/10.3102/0034654315583135>
- Herrick, S. J., Lu, W., & Bullock, D. (2020). Postsecondary students with disabilities: Predictors of adaptation to college. *Journal of College Student Retention: Research, Theory & Practice*. <https://doi.org/10.1177/1521025120941011>
- Hong, B. S. (2015). Qualitative analysis of the barriers college students with disabilities experience in higher education. *Journal of College Student Development*, 56(3), 209-226. doi: 10.1353/csd.20150032 Individuals with Disabilities Education Improvement Act, Pub. L. No. 108-446 (2004).
- Ishitani, T. T. (2006). Studying attrition and degree completion behavior among first-generation college students in the United States. *The Journal of Higher Education*, 77(5), 861-885.
- Ju, S., Zeng, W., & Landmark, L. J. (2017). Self-Determination and Academic Success of students with disabilities in postsecondary education: A review. *Journal of Disability Policy Studies*, 28(3), 180–189. <https://doi.org/10.1177/1044207317739402>
- Kim, W. H., & Lee, J. (2016). The effect of accommodation on academic performance of college students with disabilities. *Rehabilitation Counseling Bulletin*, 60(1), 40–50. <https://doi.org/10.1177/0034355215605259>
- Koch, L. C., Mamiseishvili, K., & Wilkins, M. J. (2016). Postsecondary integration and persistence: A comparison of students with psychiatric disabilities to students with learning disabilities/attention deficit disorders. *Rehabilitation Research, Policy, and Education*, 30(3), 259-275.
- Mamiseishvili, K., & Koch, L. C. (2011). First-to-second-year persistence of students with disabilities in postsecondary institutions in the United States. *Rehabilitation Counseling Bulletin*, 54(2), 93-105. doi:10.1177/0034355210382580
- Mamiseishvili, K., & Koch, L. C. (2012). Students with disabilities at 2-Year institutions in the United States: Factors related to success. *Community College Review*, 40(4), 320–339. <https://doi.org/10.1177/0091552112456281>
- National Center for Educational Statistics. (2019). Fast facts: Back to school statistics. <https://nces.ed.gov/fastfacts/display.asp?id=372>
- Newman, L., Wagner, M., Knokey, A.-M., Marder, C., Nagle, K., Shaver, D., Wei, X., with Cameto, R., Contreras, E., Ferguson, K., Greene, S., and Swarting, M. (2011). *The Post-High School Outcomes of Young Adults 21st Disabilities up to 8 Years After High School. A Report From the National Longitudinal Transition Study-2 (NLTS2)* (NCSE 2011-3005). Menlo Park, CA: SRI International. Available at www.nlts2.org/reports/
- Sachs, D., & Schreuer, N. (2011). Inclusion of students with disabilities in higher education: performance and participation in student's experiences. *Disability Studies Quarterly*, 31.
- Shapiro, D., Dunder, A., Huie, F., Wakhungu, P., Yuan, X., Nathan, A & Hwang, Y., A. (2017, April). *Completing College: A National View of Student Attainment Rates by Race and – Fall 2010 Cohort* (Signature Report No. 12b). Herndon, VA: National Student Clearinghouse Research Center.
- Shapiro, D., Ryu, M., Huie, F., Liu, Q. (2019). Some college, no degree: A 2019 snapshot for the nation and 50 states (Signature Report No. 17). National Student Clearinghouse Research Center.
- Shattuck, P., Steinberg, J., Yu, J., Wei, X., Cooper, B., Newman, L., & Roux, A. (2014). Disability Identification and Self-Efficacy among College Students on the Autism Spectrum. *Autism research and treatment*. 924182. 10.1155/2014/924182.
- Sweet, S. N., Fortier, M. S., Strachan, S. M., & Blanchard, C. M. (2012). Testing and integrating self-determination theory and self-efficacy theory in a physical activity context. *Canadian Psychology/Psychologiecanadienne*, 53(4), 319–327. <https://doi.org/10.1037/a0030280>
- Terriquez, V., & Gurantz, O. (2015). Financial challenges in emerging adulthood and students' decisions to stop out of college. *Emerging Adulthood*, 3(3), 204-214. <https://doi.org/10.1177/2167696814550684>
- Torpey, E. (2018). "Measuring the value of education," *Career Outlook*, U.S. Bureau of Labor Statistics.
- Toutain, C. (2019). Barriers to accommodations for students with disabilities in higher education: A literature review. *Journal of Postsecondary Education and Disability*, 32(3), 297–310.
- U.S. Department of Labor, Bureau of Labor Statistics. (2021). *Persons With a Disability: Labor Force Characteristics—2020*. Washington, DC: Author. Retrieved March 23, 2021, from <https://www.bls.gov/news.release/pdf/disabl.pdf>
- U.S. Department of Labor, Bureau of Labor Statistics. (2016). *Persons With a Disability: Labor Force Characteristics—2015*. Washington, DC: Author. Retrieved March 17, 2017, from <https://www.bls.gov/news.release/pdf/disabl.pdf>.

- U.S. Department of Education, National Center for Education Statistics, 2012/17 Beginning Postsecondary Students Longitudinal Study (BPS:12/17)
- U.S. Department of Education, National Center for Education Statistics. (2020). *The Condition of Education 2020* (NCES 2020-144), Undergraduate Retention and Graduation Rates.
- Wei, X., Wagner, M., Hudson, L., Yu, J. W., & Javitz, H. (2016). The effect of transition planning participation and goal-setting on college enrollment among youth with autism spectrum disorders. *Remedial and Special Education, 37*(1), 3-14.
- White, S. W., Elias, R., Salinas, C. E., Capriola, N., Conner, C. M., Asselin, S. B., Miyazaki, Y., Mazefsky, C. A., Howlin, P., & Getzel, E. E. (2016). Students with autism spectrum disorder in college: Results from a preliminary mixed methods needs analysis. *Research in developmental disabilities, 56*, 29–40. <https://doi.org/10.1016/j.ridd.2016.05.010>